

Effects of Topical Phenytoin Cream on Episiotomy Repair in Primiparous Women: A Double Blind Clinical Trial

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Abstract

Episiotomy is the most prevalent obstetrical procedure with the purpose of either widening vaginal outlet or helping the fetus to deliver as soon as possible with the most feto-maternal safety. The aim of this study is to find out the effects of topical phenytoin cream on wound repair in primiparous women. One-hundred-thirty primiparous mothers were referred to Kowsar Hospital in Qazvin province participated in this clinical trial. Sixty-five participants were assigned in each of intervention and control groups. The intervention group was treated with topical 1% Phenytoin cream and 10% povidone-iodine (betadine) solution and the control group received placebo and betadine solution. Wound irrigation with betadine was performed as the routine order in the hospital, three times daily and two centimeters of topical phenytoin or placebo cream, were applied to the wound twice daily. The rate of episiotomy repair was measured by REEDA index in the first 24 h, the fifth and the tenth puerperal day. Data analyses were done *t*-test and chi-square test and Mann-Whitney. In the first 24 h, it was 6.43 ± 2.15 in the intervention group versus 6.52 ± 5.09 in the control group with no significant difference. However on The 5th day, it appeared 4.56 ± 3.01 in the intervention group versus 6.54 ± 2.98 in the control group ($p < 0.001$), likewise it was 5.82 ± 2.83 in the control group on the tenth day ($p < 0.001$). Significant difference was detected both in the 5th and 10th postpartum days. The result of this trial suggested that 1% phenytoin cream speeds-up the wound healing process; therefore it could be applied for accelerating episiotomy repair.

Keywords: Episiotomy; Phenytoin; Betadine; Primiparity.